

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims:

1. **(Currently Amended)** An ALD process for deposition of a metal selected from Pd, Rh, Ru, Pt and Ir comprising pulsing into a chamber containing a surface-forming a layer comprising the metal on a surface comprising a material selected from W, Ta, Cu, Ni, Co, Fe, Mn, Cr, V, Nb, tungsten nitride, tantalum nitride, titanium nitride, dielectrics, and activated dielectrics a reducing gas selected from glyoxylic acid and imidazole at a temperature ranging from >60°C to <260°C so as to form a layer on the surface, wherein the layer comprises the metal.
2. **(Currently Amended)** An ALD process according to claim 1, wherein forming a layer comprises sequentially pulsing into a chamber containing the surface a precursor for the metal and a the reducing gas selected from hydrogen, is glyoxylic acid, oxalic acid, formaldehyde, 2-propanol, imidazole and plasma activated hydrogen.
3. **(Cancelled)**
4. **(Original)** An ALD process according to claim 3 wherein the surface is a noble metal.
5. **(Original)** An ALD process according to claim 3 wherein the surface is a pretreated metallic surface selected from W, Ta, tungsten nitride, tantalum nitride, and titanium nitride.
6. **(Original)** An ALD process according to claim 3 wherein the surface is a metal selected from Cu, Ni, Co, Fe, Mn, Cr, V and Nb.
7. **(Currently Amended)** An ALD process for deposition of a metal selected from Pd, Rh, Ru, Pt and Ir comprising

providing a surface comprising a material selected from noble metals, W, Ta, Cu,

Ni, Co, Fe, Mn, Cr, V Nb, tungsten nitride, tantalum nitride, titanium nitride, dielectrics and activated dielectrics in a reaction chamber at a temperature ranging from >60°C to <260°C;

pulsing a precursor for the metal into the chamber; and

pulsing into the chamber a reducing gas selected from glyoxylic acid, ~~oxalic acid~~, formaldehyde, 2-propanol, and imidazole.

8. (Original) An ALD process according to claim 7 wherein the reducing gas is glyoxylic acid.
9. (Previously Presented) An ALD process according to claim 7 wherein the activated dielectric surface comprises at least one of thiol, sulfide, tetrasulfide, phosphine, phosphide or amine groups.
10. (Previously Presented) An ALD process according to claim 7 wherein the activated dielectric surface comprises thiol groups.
11. (Previously Presented) An ALD process according to claim 7 wherein the dielectric is selected from CVD polymers, organic-inorganic hybrids, and silicon or metals having an oxide-terminated surface.
12. (Currently Amended) An ALD process for deposition of a metal selected from Pd, Rh, Ru, Pt and Ir comprising
 - providing a substrate in a reaction chamber;
 - pulsing a precursor for the metal into the chamber at a temperature ranging from >60°C to <260°C; and
 - pulsing plasma-activated hydrogen gas glyoxylic acid into the chamber.
13. (Currently Amended) An ALD process according to claim 12, wherein the precursor is a metal β -diketonate compound.
14. (Currently Amended) An ALD process according to claim 12, wherein the

precursor is a metal-hfac compound.

15. **(Currently Amended)** An ALD process according to claim 12, wherein the precursor is selected from Pd(hfac)₂, Ru(hfac)₂, Rh(hfac)₂, Pt(hfac)₂, Ir(hfac)₂, Ir(acac)₂, Pd(tmhd)₂, Ru(tmhd)₂, Rh(tmhd)₂, Pt(tmhd)₂, and Ir(tmhd)₂.
16. **(Currently Amended)** An ALD process according to claim 12, wherein the metal is Pd.
17. **(Currently Amended)** An ALD process according to claim 12, wherein the precursor is Pd(hfac)₂.